

CLAIMS

Having thus described the aforementioned invention, I claim:

1. A sheath for a manually manipulated controller having at least one accessible button control or rotary control, comprising:

top and bottom flexible panels, said top panel including a contoured perimeter and said bottom panel including a substantially like-configured perimeter;

said contoured perimeter including a rounded first end portion having first and second opposite ends and having first and second linear side portions, said first side portion being an extension of said first end of said rounded first end portion, and said second side portion being an extension of said second end of said rounded first end portion;

said contoured perimeter including third and fourth linear side portions, each having respective first and second ends, said third and fourth linear side portions ends being adjacently spaced apart from said first and second linear side portions;

said contoured perimeter further including first and second shoulder portions interposed to extend from respective ones of said second end of said first linear side portion and said second end of said second linear side portion and defining a continuous transition between

19 each of said second ends of said first and second linear side portions and
20 said first ends of said third and fourth linear side portions;

21 said panels being overlaid on one another with their respective
22 contoured perimeters in register;

23 means bonding said overlaid panels to one another along their
24 respective overlaid rounded first end portions, along their respective
25 linear side portions and along their respective shoulder portions;

26 one of said first and second shoulder portions defining an
27 uninterrupted transition between its respective linear side portions and
28 the other of said first and second shoulder portions defining a scalloped
29 transition between its respective linear side portions, whereby said
30 scalloped transition exhibits expansibility in excess of the expansibility of
31 said uninterrupted transition for the receipt therein of the at least one
32 button control or rotary control of the manually manipulated controller
33 when the controller is disposed within the sheath.

1 2. The sheath of Claim 1, further comprising a carrier for receiving
2 said sheath thereon, said sheath being releasably mounted to said
3 carrier along at least a portion of said contoured perimeter of said sheath
4 by said means bonding, whereby said sheath is removed from said
5 carrier when the controller is disposed within the sheath.

1 3. The sheath of Claim 1 wherein said third and fourth linear side
2 portions being oriented generally parallel to each other, said first and
3 second linear side portions being oriented generally parallel to each
4 other, and said first and second linear portions are adjacently parallel
5 and spaced apart by respective first and second shoulder portions from
6 said third and fourth linear side portions.

1 4. The sheath of Claim 1 wherein said first shoulder portion defines
2 said scalloped transition extended between said first linear side portion
3 and said third linear side portion.

1 5. The sheath of Claim 1 wherein said second shoulder portion
2 defines an uninterrupted curved transition extended between said
3 second linear side portion and said fourth linear side portion.

1 6. The sheath of Claim 1, wherein said controller is sized to be hand-
2 held and includes at least one visually accessible punch button control,
3 said at least one rotary control is side-mounted on said controller.

1 7. The sheath of Claim 1 wherein said sheath is fabricated from a
2 flexible transparent material selected from the group consisting of poly-

3 ether urethane, metalacine plastic, and a sterilizable polymer material.

1 8. The sheath of Claim 7 wherein said means bonding includes a
2 bond produced by a heat weld or a sonic weld of said contoured
3 perimeters in register of said panels along their respective overlaid
4 rounded first end portions, along their respective linear side portions,
5 and along their respective shoulder portions.

1 9. The sheath of Claim 2 wherein said carrier includes a receiving
2 surface for releasably securing said sheath to said carrier, said receiving
3 surface is fabricated from paper stock having a gloss finish thereon.

1 10. The sheath of Claim 9 wherein said receiving surface of said carrier
2 is encapsulated with a polymer material to which said contoured
3 perimeter of said sheath is releasably secured.

1 11. A sheath for covering a manually manipulated controller having at
2 least one user accessible control or at least one rotary control thereon
3 proximal to an insertion end, said sheath comprising:

4 a first and a second sheath panel of flexible materials, each
5 panel having like-configured dimensions including a contoured

6 perimeter, a nose end having first and second curved sides, a
7 second end in opposing relationship with said nose end, a first
8 linear side portion being extruded from said first curved side and a
9 second linear side portions being extruded from said second
10 curved side of said nose end, said first and second panels being
11 overlaid on one another with their respective contoured perimeters
12 in register;

13 a third and fourth linear side portion, each having respective
14 first and second ends, said third linear side portion having said
15 first end extended from said first shoulder portion, said fourth
16 linear side portion having said first end extended from said second
17 shoulder portion, said second ends of each third and fourth linear
18 side portion being spaced apart and opposed from said nose end of
19 said sheath;

20 a first shoulder portion defining a scalloped transition
21 between said first linear side portion and said third linear side
22 portion; and

23 a second shoulder portion defining a curved transition
24 between said second linear side portion and said fourth linear side
25 portion,

26 whereby said first shoulder scalloped transition exhibits

27 expansibility in excess of the expansibility of said second shoulder
28 curved transition for the receipt therein of the at least control or
29 the rotary control of the controller when disposed within the
30 sheath.

1 12. The sheath of Claim 11 wherein said scalloped transition includes:
2 an arcuate first shoulder having a convoluted profile of material
3 extended therefrom, said convoluted profile formed by a plurality of
4 ridges disposed in a spaced apart orientation along said arcuate first
5 shoulder, said ridges forming pouches therebetween when the insertion
6 end of the controller is inserted in the sheath, whereby when said
7 arcuate first shoulder is positioned to cover at least one control on the
8 controller, said convoluted profile of material is stretchable over one or
9 more controls on the controller, thereby allowing the user to manipulate
10 the controls without tearing said sheath flexible material;

1 13. The sheath of Claim 11 wherein said second shoulder portion
2 includes said curved transition positioned laterally adjacent of said
3 scalloped transition, whereby said curved transition and said scalloped
4 transition provide a base diameter between said third and fourth linear
5 side portions that is greater than a nose diameter between said first and

6 second linear side portions thereby the insertion end of the controller is
7 closely fitted within said nose end of said first and second sheath panels.

1 14. The sheath of Claim 13, wherein said second shoulder portion
2 curved portion further includes a scalloped transition having a
3 convoluted profile of material extended therefrom, said convoluted profile
4 formed by a plurality of ridges disposed in a spaced apart orientation
5 along said second shoulder portion, whereby when the controller is
6 inserted in said sheath said first and second shoulder portions are
7 stretchable over one or more controls on the controller thereby allowing
8 the user to manipulate the controls without tearing said sheath flexible
9 material.

1 15. The sheath of Claim 11 wherein said nose end includes a perimeter
2 weld extended between said first and second shoulder portions, said
3 perimeter weld is releasably secured to said carrier.

1 16. The sheath of Claim 11 wherein said receiving surface of said
2 carrier is fabricated from paper stock and includes a receiving surface
3 being encapsulated with a polymer material to which said contoured
4 perimeter of said sheath is bonded whereby said second end is not

5 bonded to said carrier.

1 17. A sheath for covering a hand-held device having at least one user
2 manipulated switch control or a rotatable control thereon, comprising:

3 a tubular sheath of flexible material having an open end, a
4 nose end and a perimeter extended between said open end and
5 said nose end;

6 a first and second shoulder segment disposed along
7 respective first and second sides; and

8 one of said first and second shoulder segments defining an
9 uninterrupted transition between its respective linear side portions
10 and the other of said first and second shoulder portions defining a
11 scalloped transition between its respective linear side portions,
12 whereby said scalloped transition exhibits expansibility in excess
13 of the expansibility of said uninterrupted transition for receipt
14 therein of the at least one control of the hand-held device when
15 disposed within the sheath.

1 18. The sheath of Claim 17 wherein said scalloped transition is
2 disposed along said first shoulder segment, whereby when said scalloped
3 transition is disposed to cover one of the controls on the device, said

4 scalloped transition provides flexible material expansible during
5 manipulation of the respective control by the user, said flexible material
6 is resiliently returned to a pre-manipulation configuration after cessation
7 of the user's manipulation of the at least one control on the device
8 without tearing of said flexible material of said sheath.

1 19. The sheath of Claim 17 wherein said uninterrupted transition is
2 disposed on said second shoulder segment and further includes:

3 an arcuately angled second shoulder having a convoluted profile of
4 material extended from said arcuately angled side, whereby when said
5 arcuately angled side is removed from said carrier by the hand-held
6 device positioned therebetween, said convoluted profile of material is
7 stretched over the controls on the hand-held device for user
8 manipulation thereof without tearing said sheath.

9 20. The sheath of Claim 17 further comprising a carrier having a
10 receiving surface for releasably securing said sheath in an elongated
11 position thereon, said sheath being releasably secured to said carrier
12 along at least a portion of said contoured perimeter of said sheath by
13 said means bonding, whereby said sheath is removed from said carrier
14 when the hand-held device is disposed within said sheath.